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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/717,461

11/21/2003

Kjell-Tore Smith

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12/19/2008

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EXAMINER

FELTON, AILEEN BAKER

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

12/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/717,461	Applicant(s) SMITH ET AL.	
	Examiner Aileen B. Felton	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-5, 9, 11-14, 17-22, 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Han (6485587) in view of Svenson (4638065).

Han et al discloses an explosive composition produced by slurry process comprising bimodal HMX or RDX. Example 5 discloses bimodal HMX with 51 % of Class 1, 41 % Class 5, 2 % of Hytemp 4454, and 6% of DOA. Not disclosed is the claimed particle sizes of the two different portions.

Svenson teaches bimodal RDX and HMX of size 10 and 70 microns (ex. 1, 3, and 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the particle sizes taught by Svenson since Svenson suggests that these are known sizes to use with bimodal RDX and HMX and since Han discloses bimodal RDX and HMX. It is also obvious to vary the amounts and sizes of the RDX and HMX to achieve a desired result. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

4. Claims 2, 7, 8, 10, 15, 16, 22-26, 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Han (6485587) in view of Svenson (4638065) as applied to claims 1, 3-5, 9, 11-14, 17-22, 27-31 above, and further in view of Godsey (4298411).

Godsey teaches that it is known to use mixtures of HMX and RDX when employing a bimodal oxidizer in a propellant composition (col. 8, lines 15-31).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use mixtures of HMX and RDX as taught by Godsey since Godsey suggests that it is known to use mixtures of the two in a propellant with a bimodal oxidizer and since Han and Svenson both teach HMX and RDX as bimodal oxidizers. It is also obvious to vary the amounts and sizes of the RDX and HMX to achieve a desired result. It is well-settled that optimizing a result effective variable is

well within the expected ability of a person of ordinary skill in the subject art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

5. Claims 36-40 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the article to Rudolf et al (cited on IDS dated 3/9/2006).

This article recites bimodal HMX and RDX with Hytemp and DOA that is pressed to greater than 98 % TMD. The pressure is disclosed for a 50 mm diameter pellet. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the pressure for different size pellets or to obtain different densities in order to optimize the explosive. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

6. Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over the article to Rudolf et al (cited on IDS dated 3/9/2006) as applied to claims 36-40 above, and further in view of Han (6485587), Svenson (4638065), and Godsey (4298411).

Han et al discloses an explosive composition produced by slurry process comprising bimodal HMX or RDX. Example 5 discloses bimodal HMX with 51 % of Class 1, 41 % Class 5, 2 % of Hytemp 4454, and 6% of DOA. Not disclosed is the claimed particle sizes of the two different portions.

Svenson teaches bimodal RDX and HMX of size 10 and 70 microns (ex. 1, 3, and 4).

Godsey teaches that it is known to use mixtures of HMX and RDX when employing a bimodal oxidizer in a propellant composition (col. 8, lines 15-31).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the particle sizes taught by Svenson since Svenson suggests that these are known sizes to use with bimodal RDX and HMX and since Han discloses bimodal RDX and HMX. It is obvious to use mixtures of HMX and RDX as taught by Godsey since Godsey suggests that it is known to use mixtures of the two in a propellant with a bimodal oxidizer and since Han and Svenson both teach HMX and RDX as bimodal oxidizers. It is also obvious to vary the amounts and sizes of the RDX and HMX to achieve a desired result. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), In re Aller, 220 F.2d 454,

105 USPQ 233 (CCPA 1955). If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Response to Arguments

7. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues that the prior art teaches away from the claimed invention, this is not the case at all since the prior art discloses a composition with the same components and since Svenson teaches that the claimed sizes are known to be used in the prior art. Applicant argues that Svenson does not disclose a bimodal mixture but Svenson contemplates that the products be used to obtain desired particle size distributions (see col. 1). Further note that the examples do disclose that the claimed sizes of RDX/HMX are known in the art and thus it would be obvious to use the known particles sizes disclosed by Svenson with the invention of Han.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it is obvious to

use the particle sizes taught by Svenson since Svenson suggests that these are known sizes to use with bimodal RDX and HMX and since Han discloses bimodal RDX and HMX.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aileen B. Felton whose telephone number is 571.272.6875. The examiner can normally be reached on Monday-Friday 6:30-4:00, except alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571.272.1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aileen Felton/
Primary Examiner

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